

I-84 HARTFORD PROJECT

I-84 Hartford Project Public Advisory Committee Meeting

April 20, 2016

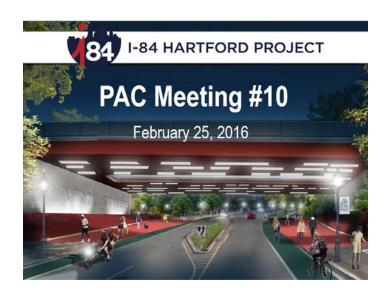
Meeting Agenda

- 1. Recap February Meeting
 - a) PAC
 - b) Working Groups
 - c) Public Safety Roundtable
- 2. Capped Highway Updates
- 3. East Coast Greenway
- 4. New Data and Tools
- 5. Public Involvement Updates

Recap of February OPS

- February 25th 26th
- PAC, Working Groups, Public Safety Roundtable
- Several UHart students attended
- Informal design discussions





PAC Meeting #10

- Updates to Lowered Alternative, both at Cogswell and Park Streets
- Recap of Tunnel Alt and challenges
- New Capped Alternative
- Urban design opportunities
- I-84/I-91 Interchange Study

Urban Design WG

- Network of active local streets and development parcels prime for TOD
- Guidelines, partnerships, and strategies to make
 TOD happen
- Craft collaborative vision between the State,
 City, and stakeholders
- Update Hartford's POCD "One City One Plan"
 - to reflect the new vision (update due in 2020)

Bicycle, Pedestrian, and Transit WG

- East Coast Greenway is a key feature
- On-street bike facilities must be part of local street redesign
- Pedestrian facilities should be more generous than the minimums established by zoning
- Frequent bus stops are problematic for cyclists,
 but transit should be prioritized and better
 amenities integrated in design

Traffic and Parking WG

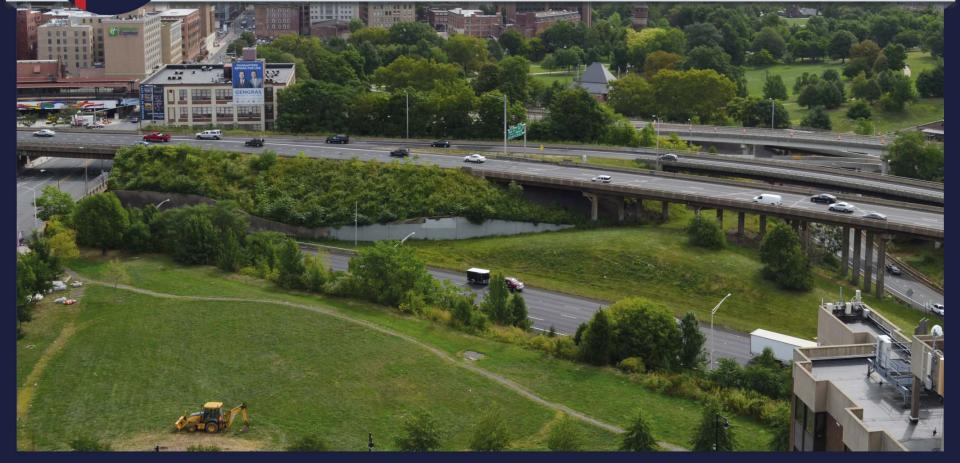
- City needs to develop a parking management plan
- Accommodate corporate shuttles at new rail station
- Figure out how to reduce parking requirements for state agencies
- Reduce parking demand with a more walkable downtown environment
- Improve signal systems and consider roundabouts

Public Safety Roundtable

- First responder access difficult in tunnel
- Other tunnel concerns, such as ventilation and hazardous materials transport
- Shorter construction duration should be explored
- Team should evaluate and identify diversion routes while highway is closed
- No real issue with closing High/Trumbull ramps

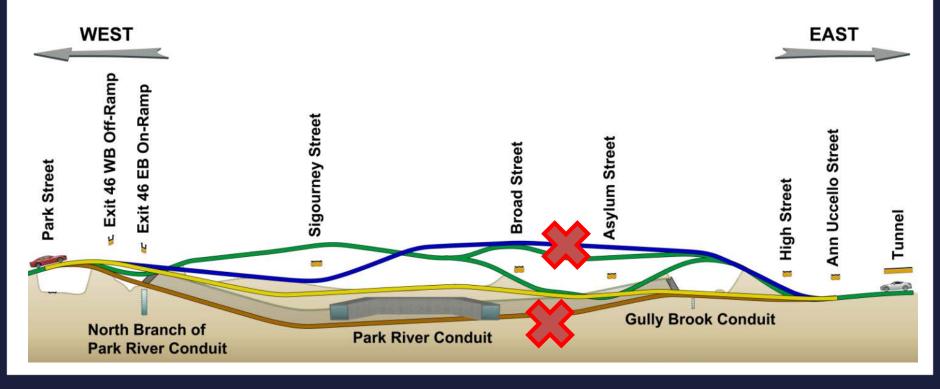


84 Alternatives Analysis Update



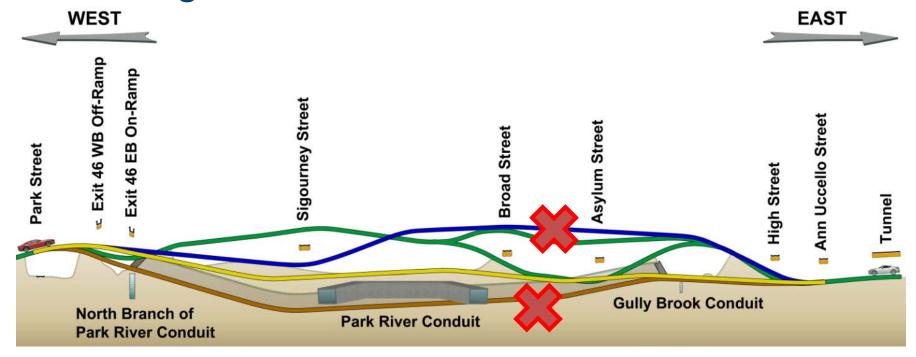
Alternatives Screening Update

 The I-84 Hartford Project Team recommends that Alternatives 2 and 4 be eliminated from further consideration



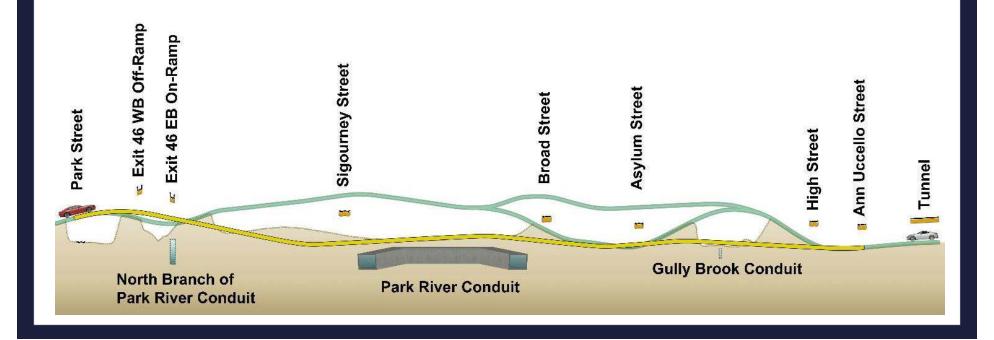
Alternatives Screening Update

- The decision will ultimately be made by the Governor, Commissioner, and FHWA
- Timing of the decision TBD



Alternatives Screening Update

- Project Team will continue refinement of Alternative 3
- Capping options possible

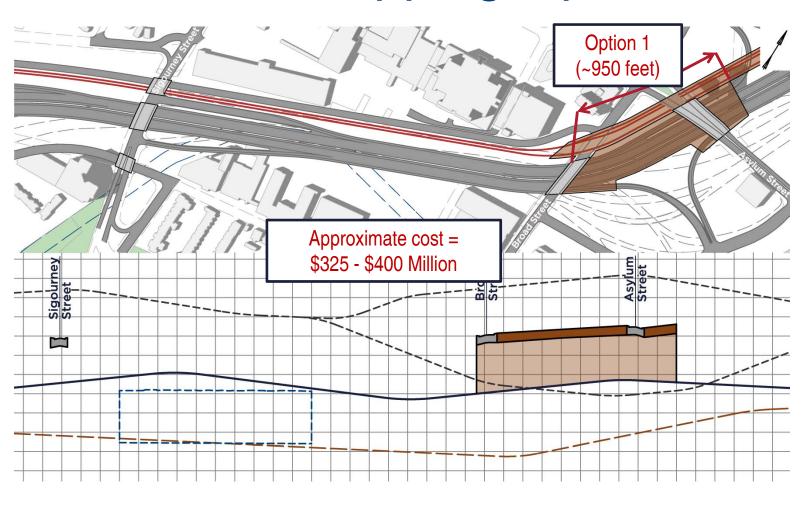


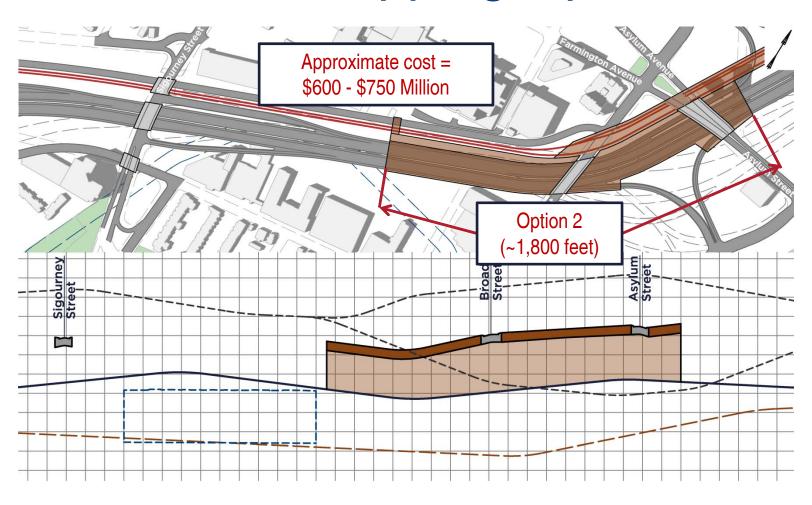
Public believes the tunnel will...

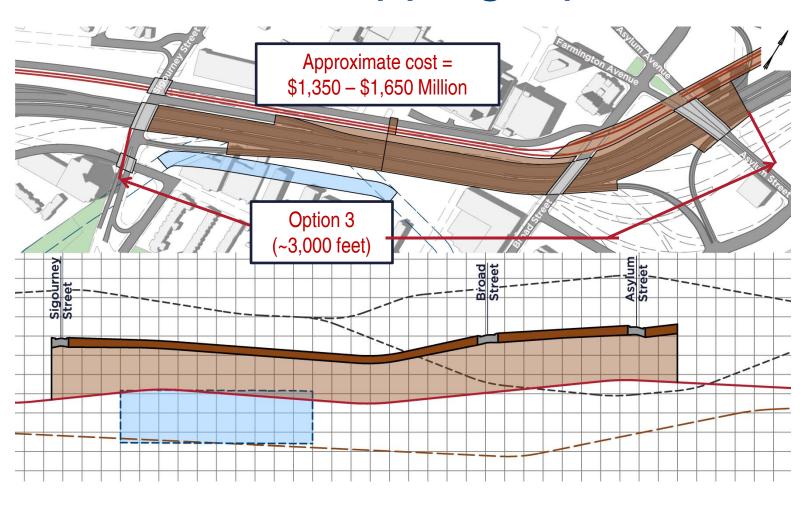
- Make the impact of the highway go away
- Better connect neighborhoods
- Provide economic development opportunities
- Connect parks via a multiuse trail
- Reduce noise and air quality impact
- Improve aesthetics

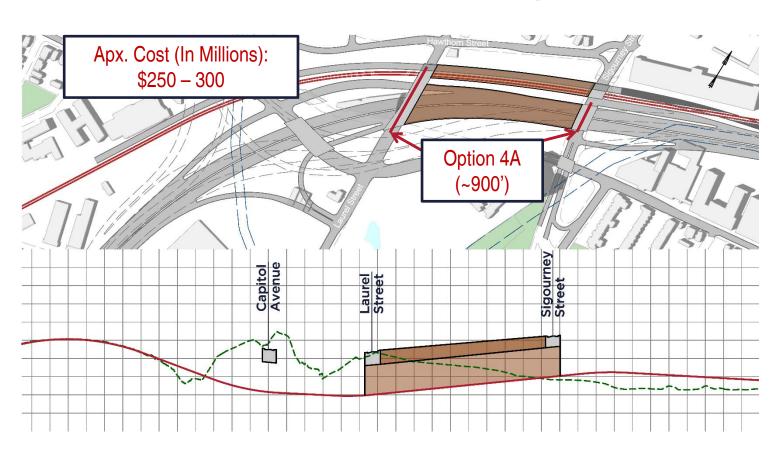
Alternative 3 with Capped Sections

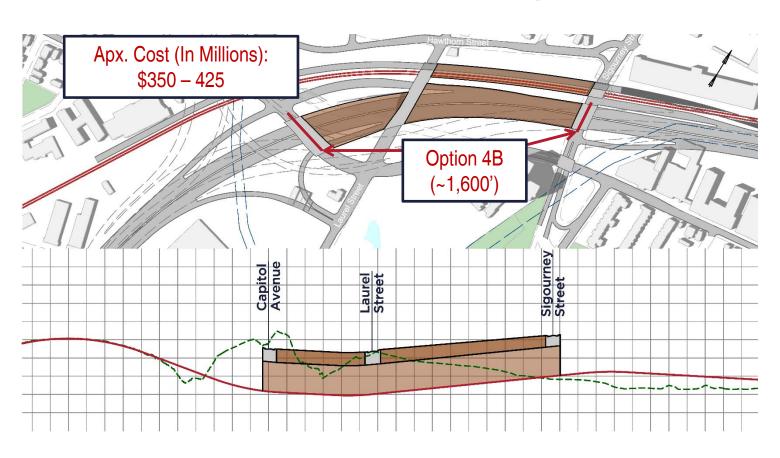


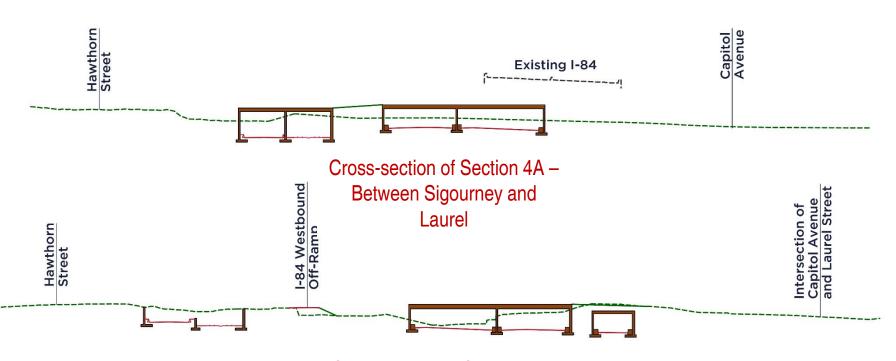








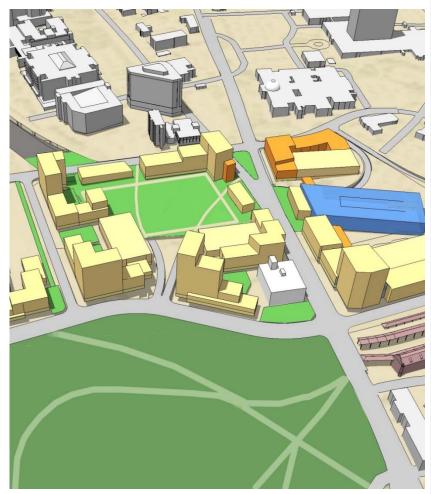




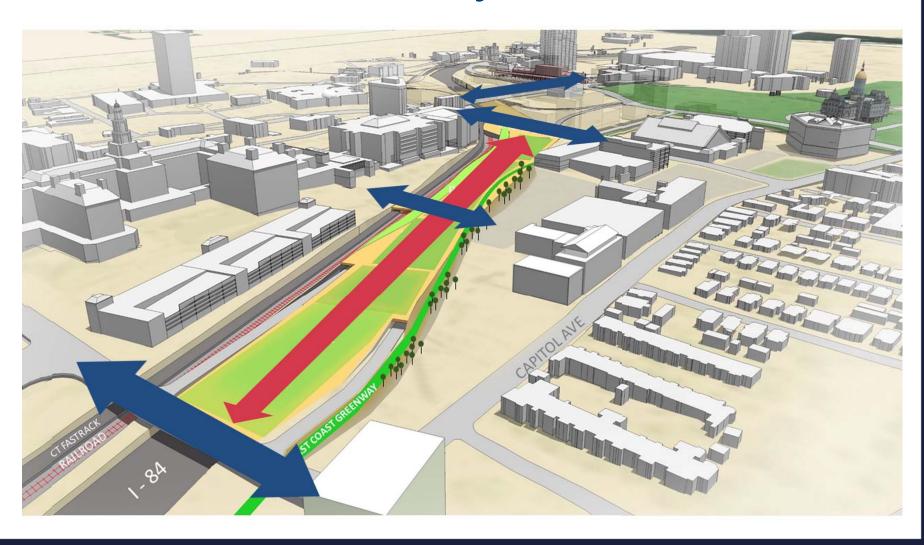
Cross-section of Section 4B– Between Laurel and Capitol

Why are we considering capping?

- All the benefits of the tunnel at much lower cost
 - Increase east-west AND north-south connections
 - Land use, open space, transportation, infrastructure, environmental improvements
 - Contributes directly to local economic growth
 - Shields highway noise and provides aesthetic improvements



Connectivity Benefits



More on the capped highway...

- Cost is approximately \$400,000 per foot
- Need to determine benefits/costs of each logical capped segment
- Are there other ways to minimize the highway's visual impact?



More on the capped highway...

- Strong opportunity for development over Asylum / Broad Street cap
- Remainder of cap limited to openspace/park and/or parking
- Limited opportunity for north-south connections (except near Flower Street)
- Costs are extreme, value engineering to continue...

Projects Under \$100 Million

•	Operations and Safety Improvements I-84/Route 2	\$5	M
•	Infrastructure Improvements for Economic Develop.	\$10	M
•	Hartford Area Capacity Improvements	\$13	M
•	Route 15 – Interchange 59 Improvements	\$20	M
•	Route 9 – Route 17 Interchange Improvements	\$30	M
•	Route 8 – Commodore Bridge Rehabilitation	\$35	M
•	Route 7 – Grist Mill Road to Route 33 Improvements	\$40	M
•	Route 2 – Improvements between Interchanges 3 & 5	\$40	M
•	I-84 – Add Operational Lane, West Hartford	\$46	M
•	I-91 –I-691/Route 15 Interchange Improvements	\$88	M
•	Route 34 – Replace Stevenson Dam Bridge	\$90	M

Projects Between \$100 - \$1,000 Million

•	Route 2A – Thames River Bridge Improvements	\$100 M
•	Route 2 – Route 17 Interchange Improvements	\$100 M
•	I-84 - Route 4 / Route 6 Interchange Improvements	\$130 M
•	I-84 – Widen from NY to Interchange 3	\$150 M
•	Route 15/Route 7 Interchange Improvements	\$200 M
•	Route 15 – West Rock Tunnel Rehabilitation	\$235 M
•	I-95 – Widen from Thames River to RI	\$290 M
•	Route 3 – Replace Putnam Bridge over CT River	\$295 M
•	Super 7 – Norwalk-Wilton	\$300 M
•	Route 9 – Route 66 / 17 Interchange Improvements	\$390 M
•	I-95 – Operational Improvements between Exit 8 & 10	\$490 M

Projects Between \$100 - \$1,000 Million (cont'd)

•	Route 8 – Operational Improvements, Naug. Valley	\$500 M
•	I-84 – Widen between Interchanges 3 & 8	\$640 M
•	Route 11 Extension	\$700 M
•	I-95 – Widen from Thames River to CT River	\$700 M
•	I-95 – Widening from Branford to CT River	\$720 M
•	I-84 – Widening between Interchanges 8 & 18	\$720 M

Projects Over \$1,000 Million

•	I-95 – Widen from Milford Connector to New Haven	\$1,350 M
•	I-95 – Widen from NY to Stamford	\$1,660 M
•	I-95 – Widen from Bridgeport to Milford Connector	\$1,930 M
•	New Bridge over the CT River, Middletown	\$2,000 M
•	I-95 – Widen from Stamford to Bridgeport	\$4,085 M
•	I-84 Hartford Project	\$5,270 M
•	I-84 – Replace I-84/Rt. 8 Mixmaster in Waterbury	\$7,065 M

Alternatives to capping?

What else can be done to shield the neighborhoods from the highway?

- Partial cap
- Noise/visual walls
- Landscaped berm/vegetation
- Elevated greenway

East Coast Greenway (new work since February PAC)

- Can the East Coast Greenway offer an appropriately scaled and cost effective design element that achieves the goals of a tunnel/cap west of Broad?
- We have been exploring Greenway options that screen the highway while providing an accessible, safe amenity that connects neighborhoods

East Coast Greenway

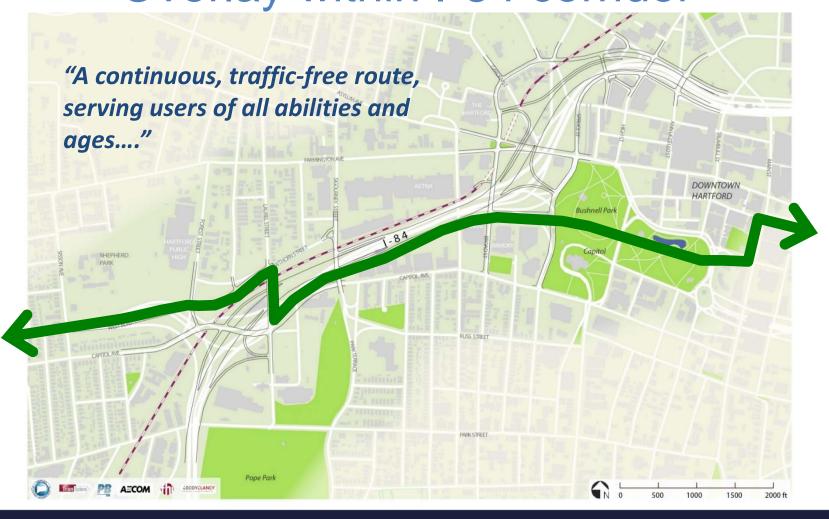
- Conceived in 1991
- 2,900 miles long
- Links Maine to Florida
- Connects existing and planned trails
- Nation's most ambitious longdistance urban trail
- Incorporates waterfront esplanades, park paths, abandoned railroad corridors, canal towpaths, and pathways along highway corridors



East Coast Greenway Route through Connecticut



East Coast Greenway Overlay within I-84 corridor



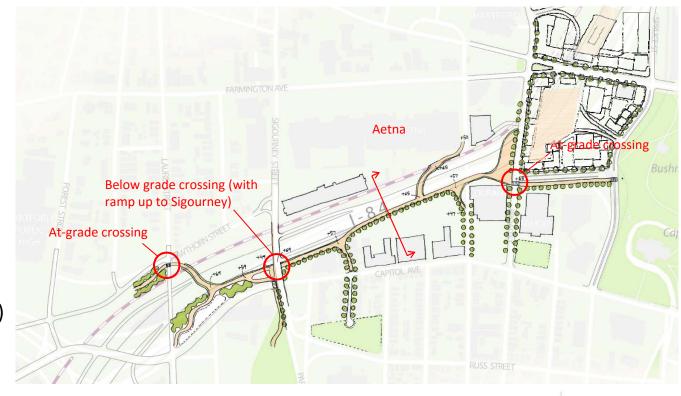
Multi-Use Greenway: Concept for I-84

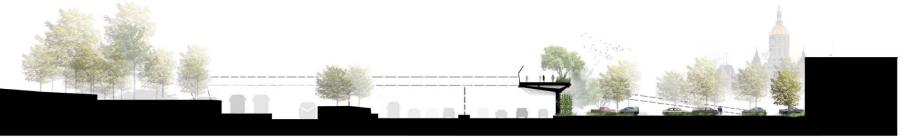
- New linear park for Hartford
- Connects neighborhoods,
 Bushnell Park, Union
 Station, Downtown
- Accessible to bikes and pedestrians
- Commuting and recreation
- Total cost of \$200-240 million for elevated option
- World-class design: Hartford's "High Line" park



Multi-Use Greenway: Concept A

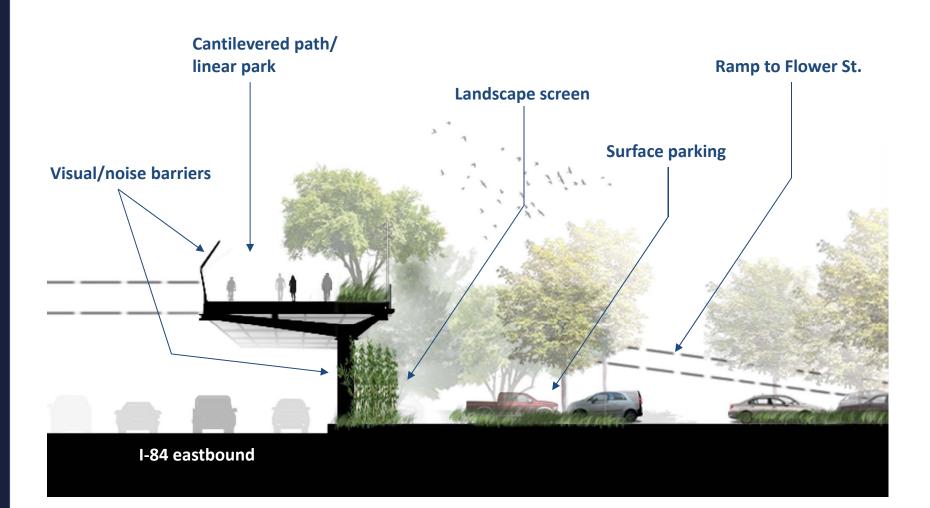
- Cantilevered over I-84
- All ramps 5% or less
- Multiple north/south and east/west access points
- Maintains parking behind Capitol Ave.
- Bike/ped bridges at Flower and Laurel
- Deck along Broad St.
- Varying path/park width (approx. 30'-60') with overlooks





Aetna campus CTfastrak Rail Lowered I-84 Greenway Parking 410 Capitol Ave

Multi-Use Greenway: Concept A

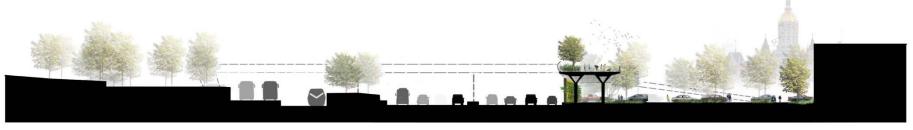




Multi-Use Greenway: Concept B

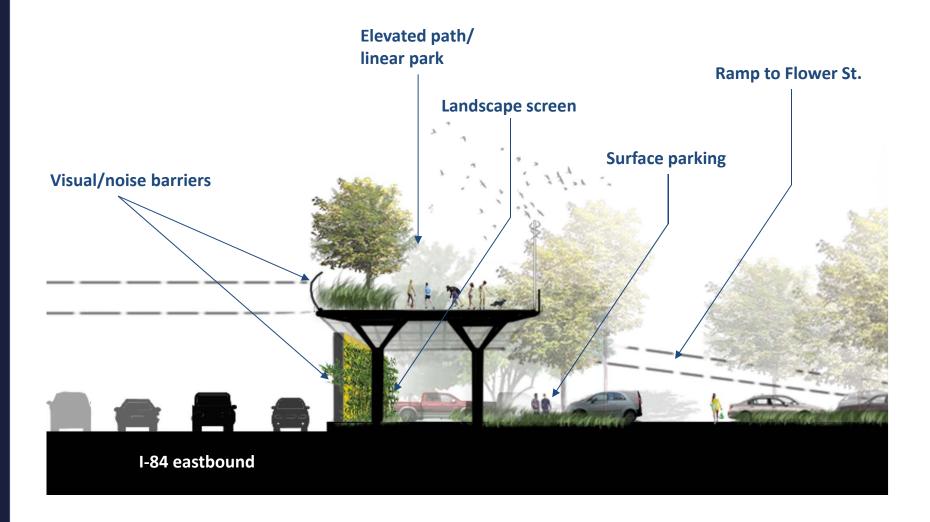
- Elevated south of I-84
- All ramps 5% or less
- Multiple north/south and east/west access points
- Allows parking underneath
- Bike/ped bridges at Flower and Laurel
- Deck along Broad St.
- Varying path/park width (approx. 30'-60') with overlook areas





Aetna campus CTfastrak Rail Lowered I-84 Greenway Parking 410 Capitol Ave

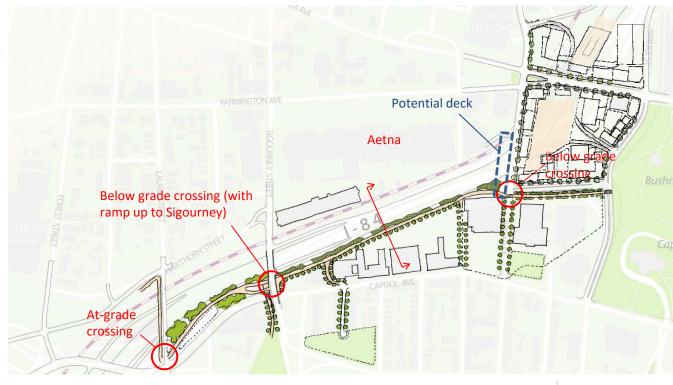
Multi-Use Greenway: Concept B





Multi-Use Greenway: Concept C

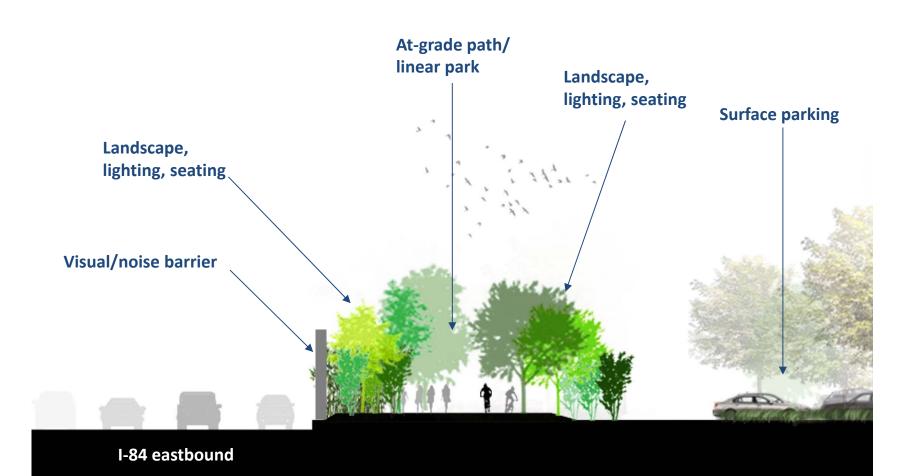
- At-grade trail/park
- Slightly reduces parking for Capitol Ave buildings
- No bike/ped bridges at Flower Street and Laurel Street
- Deck along Broad St.
- Varying path/park width (approx. 30'-60')





Aetna campus CTfastrak Rail Lowered I-84 Greenway Parking 410 Capitol Ave

Multi-Use Greenway: Concept C



Multi-Use Greenway: Potential Visual/Noise Screening



Note: The vertical screen in this rendering of the future "Navy Pier Flyover" in Chicago is blocking out a parking garage. Views to the roadway have been left open to maintain even better views to the City skyline

On the elevated path: structure for visual/noise mitigation

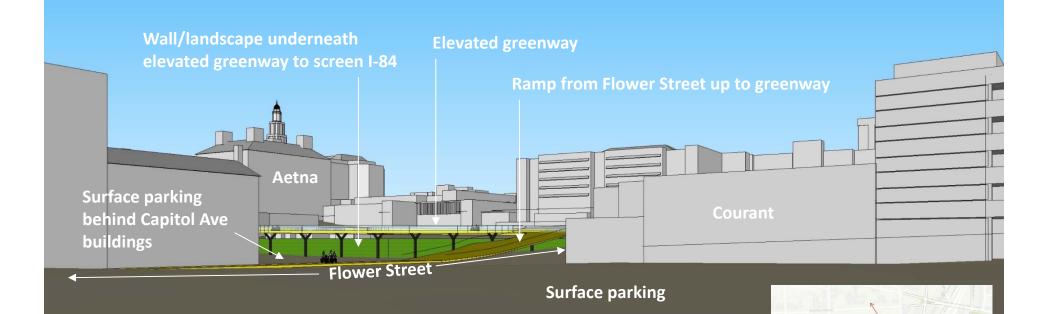




Underneath the elevated path: Wall with murals/art and landscape



Multi-Use Greenway: View from Capitol/Broad





Multi-Use Greenway: Experience on the path



Multi-Use Greenway: Precedents









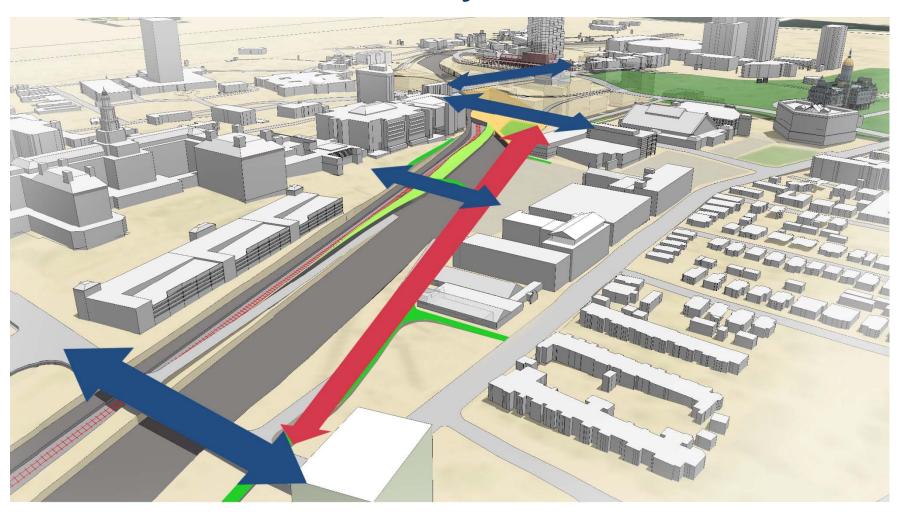








Connectivity Benefits



Connectivity Benefits

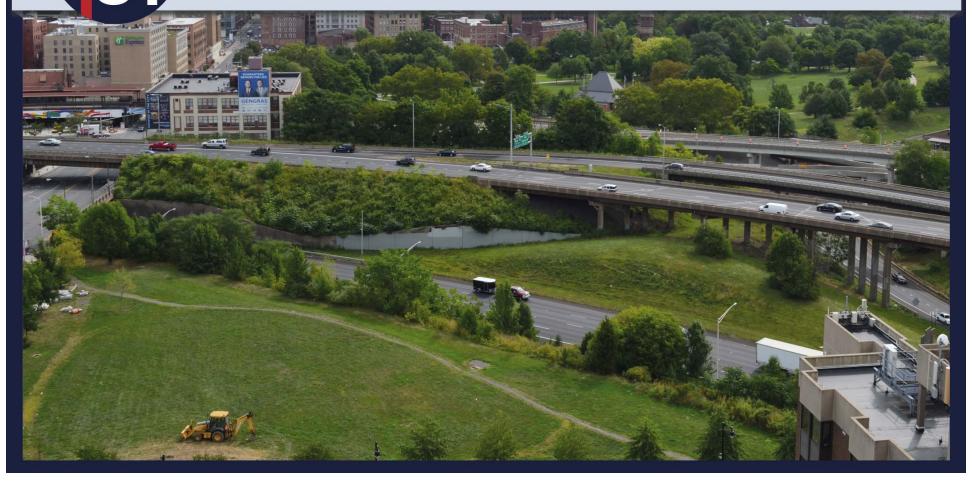


Connectivity Benefits





84 Better Information...Better Decisions



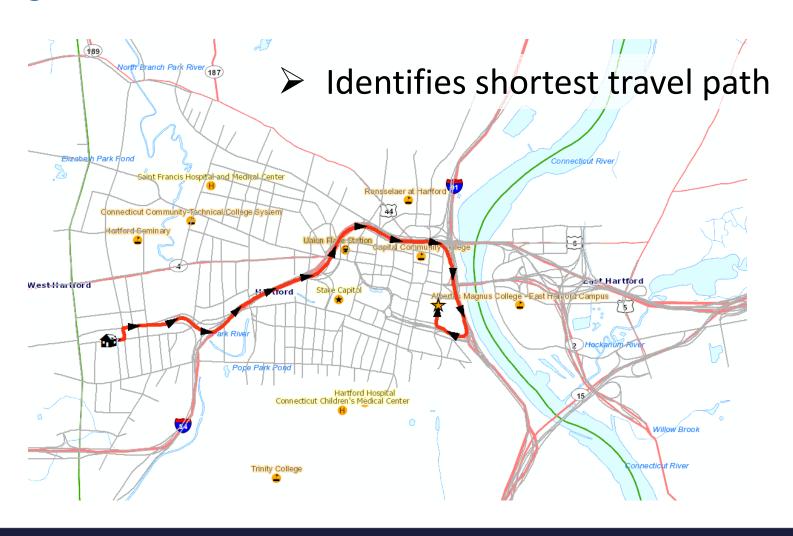
Better Data | Better Tools

- Destination Travel Time GIS Analysis Tool
- City and State-wide transit surveying
- State-wide household survey





Origin – Destination Travel Time Tool



Hartford Transit OnBoard Survey

- Survey of Greater Hartford Transit Riders
- Creating 40 temporary jobs
- Utilize latest technology:
 - tablet assisted interviews and
 - spatially coded cards
- Collect Trip information and Title VI data.
 - Trip purpose, frequency, cost, etc. & demographics
- Schedule:
 - March May, 2016 Data Collection
 - October-November, Study Findings



I-84 Hartford Stated Preference Survey

- Quantify I-84 users behavior during construction:
- Quantify I-84 users sensitivity to construction time
- Quantify I-84 users propensity to change mode
 - ➤ Utilize CTfastrak
 - **≻**Utilize CT*rail*
 - ➤ Carpool or Other



Statewide Household Survey

- Data needs for Statewide planning:
 - Statewide Travel Demand Model
- To understand travel behavior in Connecticut
 - Travel and Mobility Patterns
 - Trip Rates and Lengths
 - Transferability between modes
 - Distribution of socio-economic variables in travel patterns





How has outreach benefitted us?

- Project transparency
- Collective decision-making
- Good will
- Innovative ideas
- Challenged team
- Better design solutions



How can we do better?

- Accessibility
- Diversification
- Understanding

- Education
- Partnership
- Integration







Environmental Justice Review

Transportation should not create division; it should be the solution to past division.

U.S. Secretary of Transportation Anthony Foxx



Access and Opportunity to:

- Economic development
- Strong communities
- Air quality
- Mobility
- Jobs





Join us in 2016

- Museum Academy
 Exhibition Night, 5/5
- Know Good Market, Parkville, 5/12
- Head Start Spring Fling,
 June
- CICD Puerto Rican Parade, (6/5)



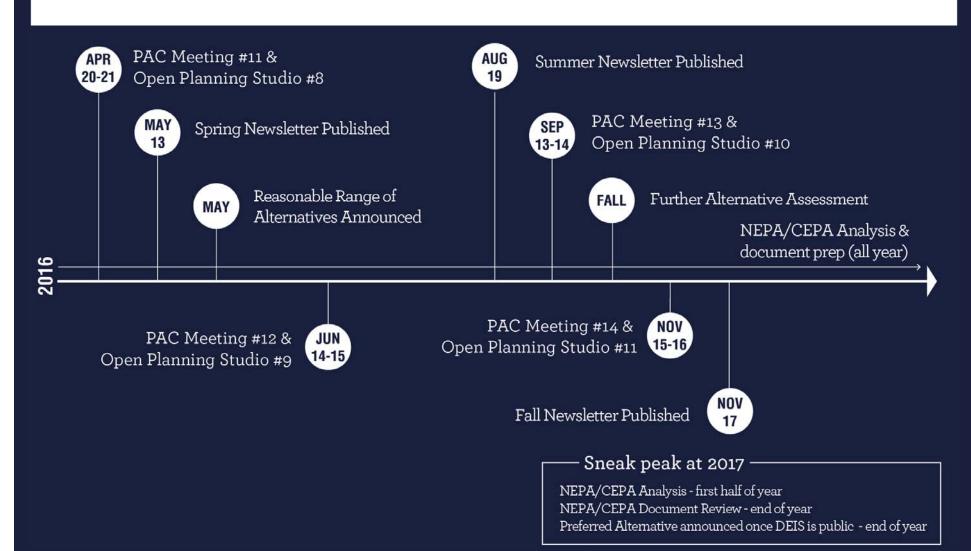








2016 At A Glance



Suggest replacing with 2016 At A Glance graphic. Shawna? Michael Coulom, 4/9/2016 MC2

Thank You!

Thank you for your time. We appreciate your commitment to helping us reach the best possible solution for the State of Connecticut, the Capitol Region, and the City of Hartford.

-Your I-84 Hartford Project Team